

DEVICE SELECTION

FIELD

[0001] The subject matter described herein relates to wireless communications.

BACKGROUND

[0002] Devices, such as smartphones, user equipment, and other wireless devices configured with a short-range wireless protocol may accept one or more wireless radio connections. The wireless protocol may be implemented as a Bluetooth, a Bluetooth Low Energy, WLAN (IEEE 802.11), ZigBee (802.15.4), cellular device-to-device communications, or any other type of short-range radio access technology. The negotiation of a service level connection may, however, be time consuming and may require generating link keys, both of which may affect or burden current processes at the wireless devices.

SUMMARY

[0003] Methods and apparatus, including computer program products, are provided for device selection.

[0004] In one aspect there is provided a method. The method may include receiving, at a wireless device through a short-range transceiver, a connection request received from another wireless device; rejecting, by the wireless device, the received connection request, wherein the wireless device obtains, before the rejecting, information from the received connection request to enable, based on at least the obtained information, a subsequent connection to the other wireless device; and initiating the subsequent connection to the other wireless device based on at least the information obtained from the received connection request.

[0005] In some variations, one or more of the features disclosed herein including the following features can optionally be included in any feasible combination. The connection request may include at least one of a host connection request, a service connection request, a profile service connection request, and an application-level service connection request. The obtained information may include an identity of the other wireless device. The identity of the other wireless device may be added to a connection list to enable the subsequent connection over a short-range link. The connection link may include a media player list. The short-range link may include at least one of a Bluetooth Low Energy link, a Bluetooth link, a ZigBee link, a cellular device-to-device link, a wireless local area link, and a Wi-Fi link. The received connection request may be received as part of a paging by the other wireless device. The other wireless device may include a media player.

[0006] The above-noted aspects and features may be implemented in systems, apparatus, methods, and/or articles depending on the desired configuration. The details of one or more variations of the subject matter described herein are set forth in the accompanying drawings and the description below. Features and advantages of the subject matter described herein will be apparent from the description and drawings, and from the claims.

DESCRIPTION OF THE DRAWINGS

[0007] In the drawings,

[0008] FIG. 1 depicts an example of a system implementing device selection, in accordance with some exemplary embodiments;

[0009] FIG. 2 depicts an example of a process for device selection, in accordance with some exemplary embodiments;

[0010] FIG. 3 depicts an example of a process for paging, in accordance with some exemplary embodiments;

[0011] FIG. 4 depicts an example of a process for obtaining identity information, in accordance with some exemplary embodiments;

[0012] FIG. 5 depicts an example of a process for rejecting a host connection, in accordance with some exemplary embodiments;

[0013] FIG. 6 depicts another example of a system implementing device selection, in accordance with some exemplary embodiments;

[0014] FIG. 7 depicts another example of a process for device selection, in accordance with some exemplary embodiments;

[0015] FIG. 8 depicts another example of a process for device selection, in accordance with some exemplary embodiments;

[0016] FIG. 9 depicts another example of a process for device selection, in accordance with some exemplary embodiments; and

[0017] FIG. 10 depicts an example of an apparatus, in accordance with some exemplary embodiments.

[0018] Like labels are used to refer to same or similar items in the drawings.

DETAILED DESCRIPTION

[0019] Service level connection negotiations between devices may be burdensome from a processing perspective at a device. As such, a device may not be ready, capable, or willing to negotiate a service level connection with another device. For example, a wireless device may be paged by another wireless device seeking to establish a short-range radio connection (including, for example, a connection between hosts), but the wireless device (which is being paged) may not be ready or otherwise willing to establish a host, profile service, or application, level connection with the other wireless device. The wireless device may, however, seek a service level connection to the other wireless device at a later time, for example, when the wireless device is ready, capable, willing, and/or needs to connect.

[0020] In some example embodiments, the subject matter disclosed herein may relate to allowing a wireless device being paged to establish a radio connection, so that the wireless device can gather one or more parameters associated with another wireless device seeking a service level connection before rejecting the service level connection. These parameters allow the wireless device to establish a subsequent service level connection. In addition to rejecting the connection before the profile service or application level connection, the connection may be rejected as well before the host level connection (which may refer to service level rejection as well). This inhibition allows the wireless device (which is otherwise not ready, capable, or willing to accept a service level connection over the short-range link) to gather and store in memory sufficient information about the other wireless device to allow a subsequent service connection at a later time to the other wireless device that requested the previously rejected service level connection (for example, via a page).

[0021] For example, the wireless device may add the other wireless device to a connection list or playlist stored in memory based on the rejected connection attempt by the other wireless device. This stored information can be used